

PARTS LIST:

| Qty | Part Number | Description |
|-----|-------------------|---|
| X | D212-664-147 | CROSSTUBE ASSEMBLY (205/212/412 LOW FWD) |
| 1 | D6019-128 | CROSSTUBE |
| 2 | D2893-1 | SUPPORT |
| 4 | D3595-063-450 | RUBBER CUSHION |
| 2 | D3659-1 | CUFF |
| 4 | MS21920-25 | CLAMP (OR MS21920-26) |
| 44 | CR3212-4-06 | RIVET (OR M7885/3-4-06) |
| A/R | MAGNOBOND 6398 | ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE) |
| A/R | SIKAFLEX-241/-291 | SEALANT (OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT) |

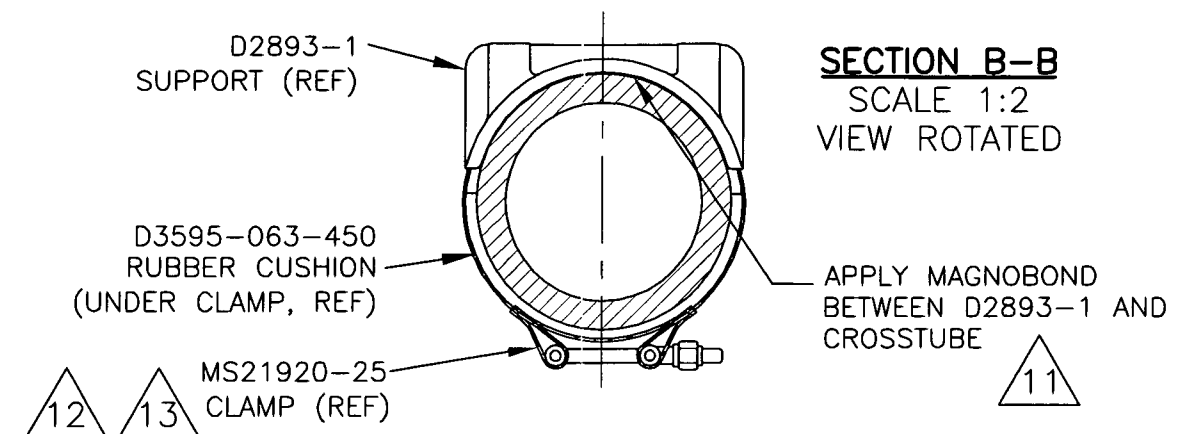
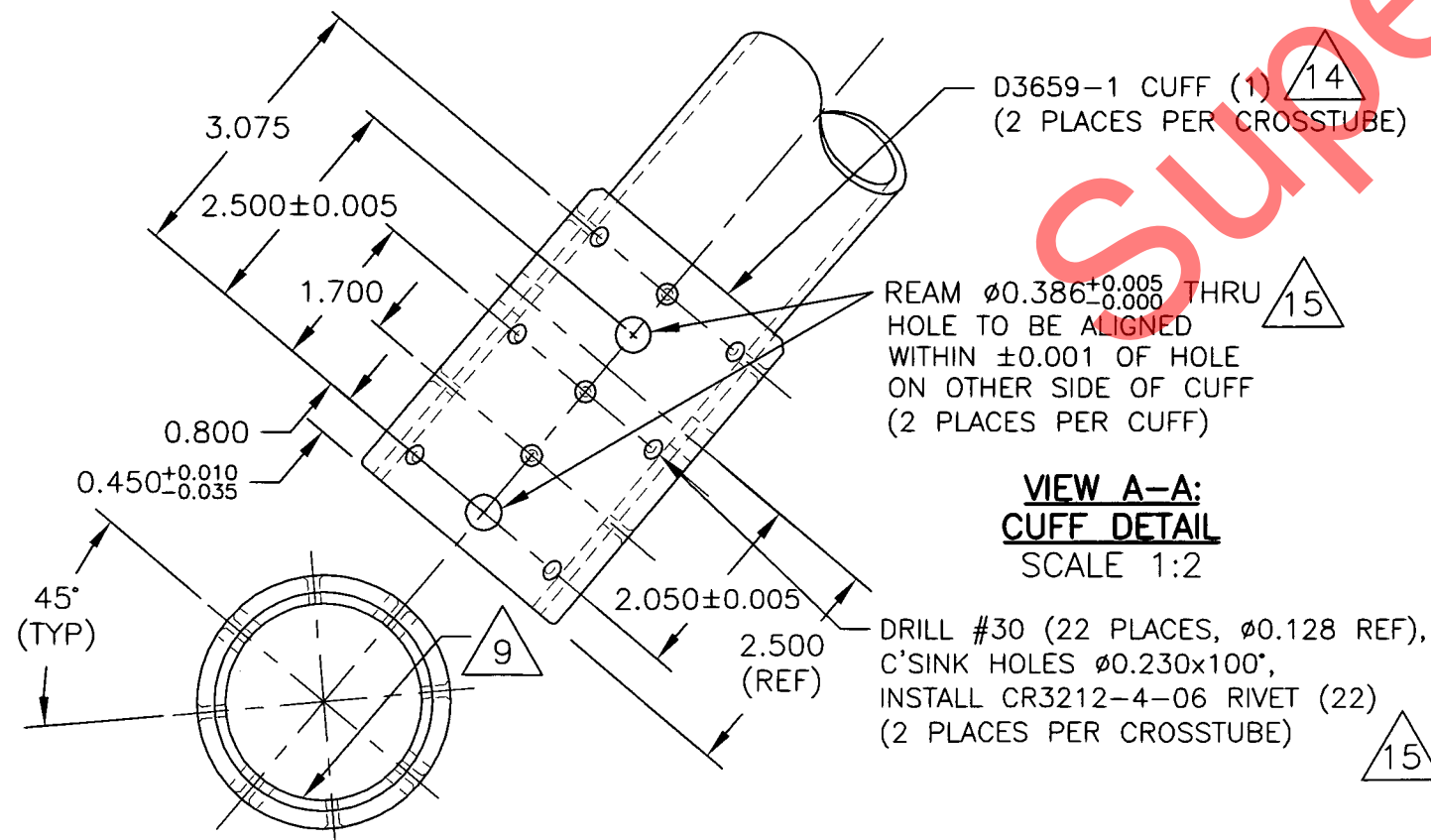
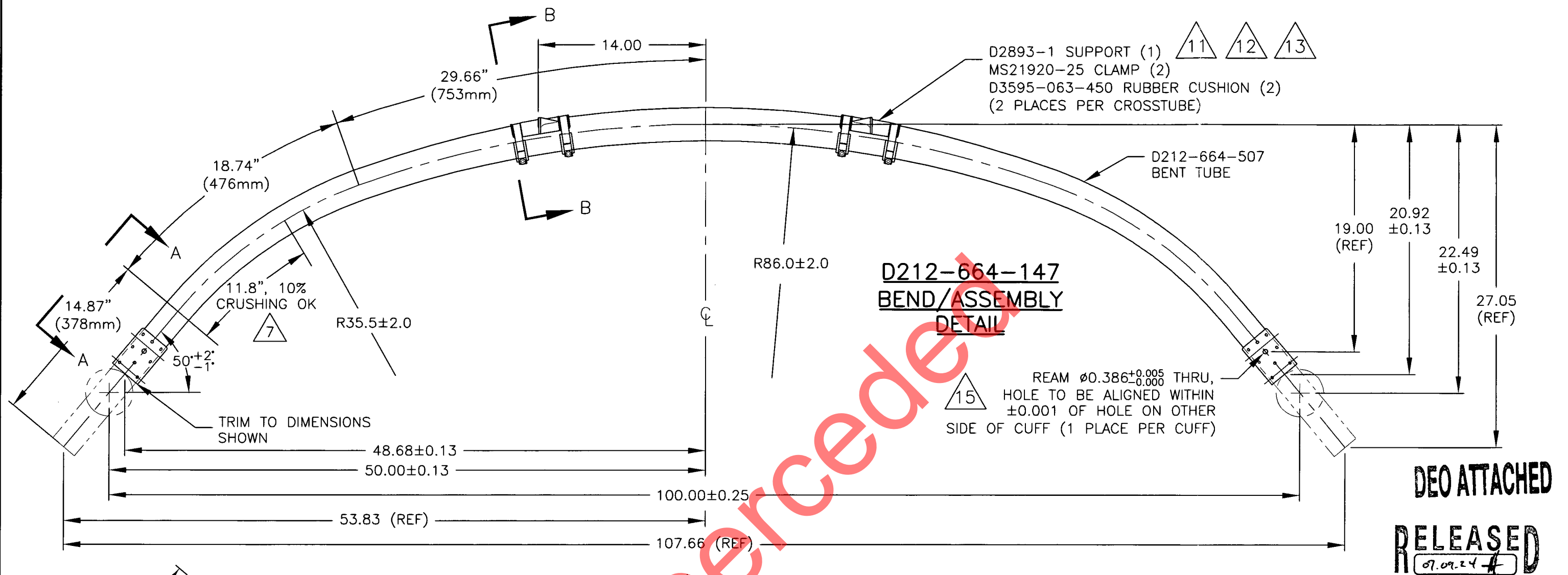
GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6019-128
FINISHED LENGTH = 126.53±0.020 (BEFORE BENDING/TRIMMING)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) PART IS SYMMETRIC ABOUT CENTERLINE.
- 6) WHEN MACHINING TAPER, RUN-OFF PART AT STOCK. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 7) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D., EXCEPT UP TO 10% IS ALLOWED IN AREA NOTED.
- 8) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 9) SCRIBE DART PART NUMBER AND BATCH NUMBER ON INNER SURFACE OF TUBE WITH A VIBRATING STYLUS.
- 10) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 11) APPLY A 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF D2893-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 12) INSTALL MS21920-25 CLAMPS (OR -26) WITH D3595-063-450 RUBBER CUSHIONS TO SECURE D2893-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE CROSSTUBE SUPPORT.
- 13) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.
- 14) INSTALL D3659-1 CUFF AFTER CHEMICAL CONVERSION COAT BUT BEFORE PAINT, WITH A LAYER OF SIKAFLEX-241/-291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT BETWEEN CUFF AND CROSSTUBE. SEAL EDGE OF CUFF TO ENSURE NO GAPS.
- 15) TOUCH-UP HOLES WITH CHEMICAL CONVERSION COAT.

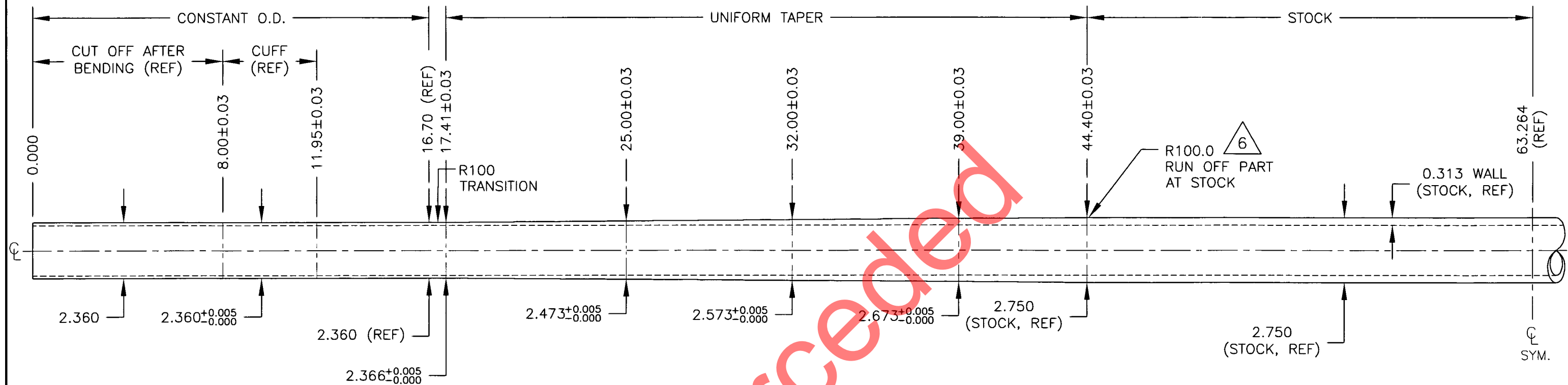
DEO ATTACHED

RELEASED
07.09.24

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|--|--|--|-----------|----|
| A | | 07.07.07 | NEW ISSUE | |
| DESIGN | | QP | DRAWN BY | QP |
| CHECKED | | RP | APPROVED | RP |
| DATE | | 07.07.07 | | |
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| | | TITLE CROSSTUBE (205/212/412 LOW FWD) NTS SCALE | | |



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|---|--|--|----------------|-----------------------------|--|
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| DATE 07.07.07 | | TITLE CROSSTUBE (205/212/412 LOW FWD) | | SCALE 1:8 | |



D212-664-147 MACHINING DETAIL

RELEASED
07.07.24

DEO ATTACHED

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HAWKESBURY, ONTARIO, CANADA

CHECKED

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DRAWING NO.

D212-664-147

REV. A

SHEET 3 OF 3

DATE

07.07.07

TITLE

CROSSTUBE (205/212/412 LOW FWD) 1:4

SCALE

| | | | | | | | |
|-----------------------------|--------------------|---------------------|---|--|--------------------------------|---------------------------|--------------|
| DRAWING NO. D212-664-147 | TITLE CROSSTUBE | REV. A | DART AEROSPACE LTD ENGINEERING ORDER | | D.E.O. NO. D212-664-147-A-1 | SHEET NO. SHEET 1 OF 1 | SCALE NTS |
| DRAWN <i>JD</i> | CHECKED <i>PH</i> | MFG. APPR. <i>E</i> | APPROVED <i>MD</i> | | DE APPR. <i>PH</i> | | |
| DATE 09.05.01 | DATE 09.06.15 | DATE 09.06.15 | DATE 09/06/16 | | DATE 09/06/16 | | |

CHANGE:

ADD THE FOLLOWING CROSSTUBE ASSEMBLY:

| Part Number | Description |
|---------------|----------------------------------|
| D212-664-147B | CROSSTUBE ASSEMBLY (214 LOW FWD) |

THE D212-664-147B CROSSTUBE HAS THE SAME PARTS LIST AS THE D212-664-147 CROSSTUBE. HOWEVER, INSTALL THE SUPPORTS AS SHOWN IN FIGURE 1 OF THIS ENGINEERING ORDER. THE NEW KIT IS OTHERWISE ASSEMBLED PER THE D212-664-147 CROSSTUBE.

RELEASED
09/06/22 *MD*

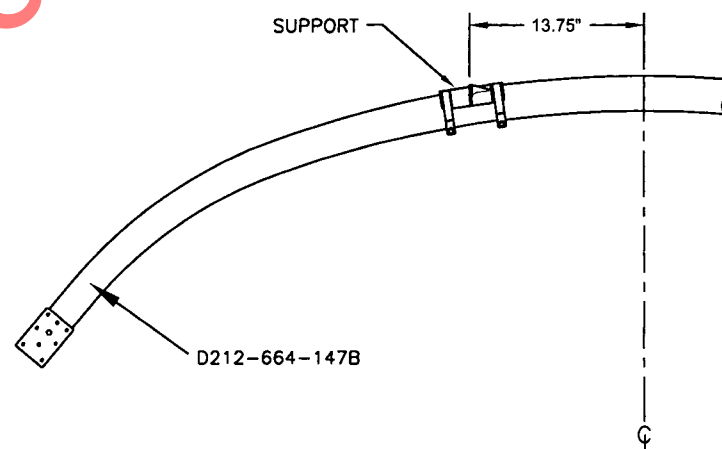


FIGURE 1 - SUPPORT INSTALLATION